



Product Range  
SYNCHROFLEX®  
Timing Belts

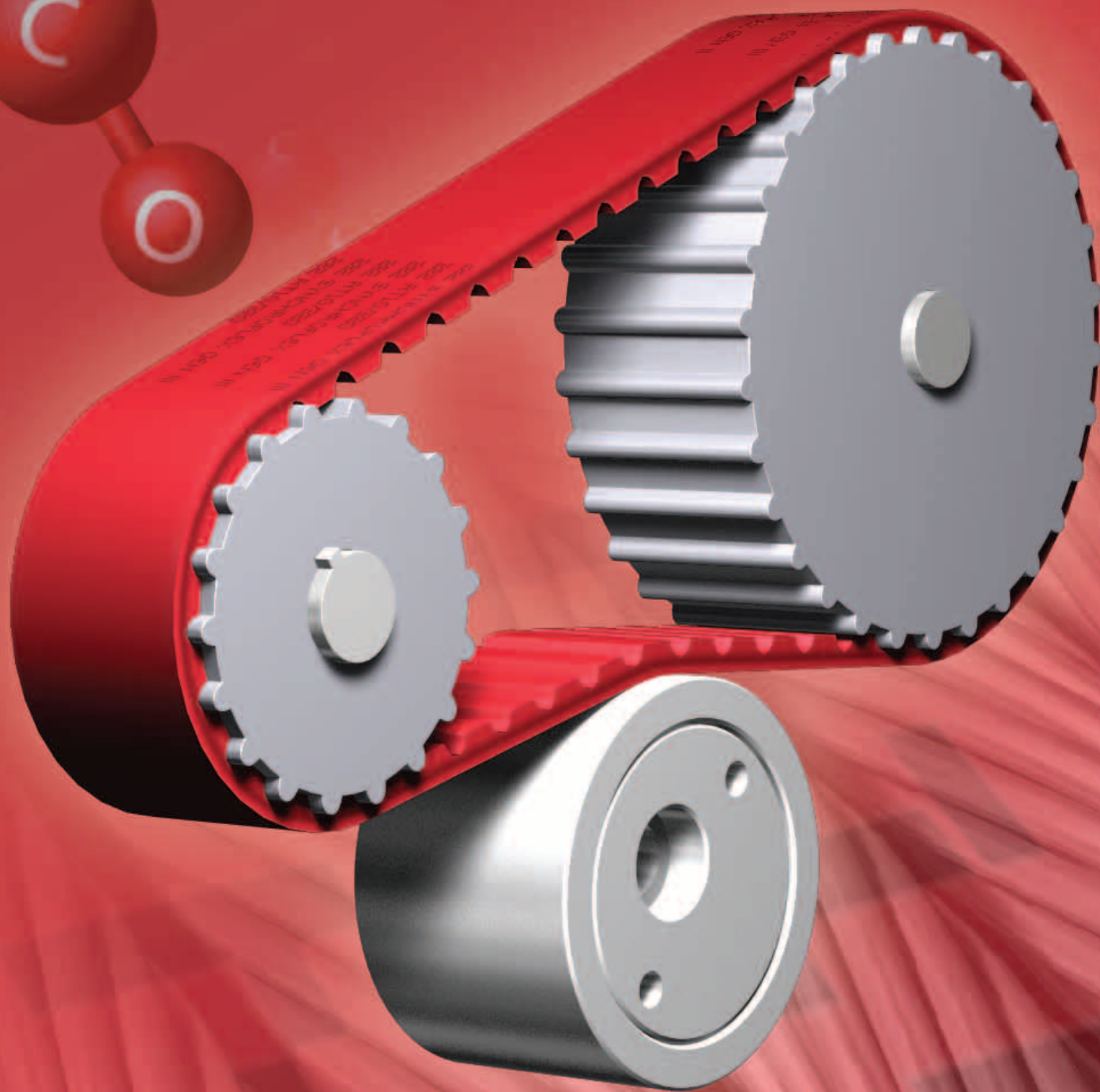
Power Transmission Group

# SYNCHROFLEX® Timing Belts

Advanced technology which stands out because of its excellent product properties

SYNCHROFLEX® Timing Belts deliver high outputs thanks to their high-grade components. The excellent bond between the hard-wearing polyurethane teeth and the constant-length galvanised steel tension members is the basis on which the high power output potential is built.

The very flexible production process is particularly suitable, for example, for manufacturing double-sided belts and rear cams with a high degree of dimensional accuracy. The range of compounds available also enables operation at low temperatures, in clean rooms and in the food industry.



## Page General Information

4	Synchroflex manufacturing processes
5	Polyurethane Timing Belts
6	Antistatic SYNCHROFLEX® Timing Belts
7	The "E" tension member
8	The new GEN III
34	Tolerances

## AT high performance Timing Belts

10	AT 3 GEN III
11	AT 3
12	AT 5 GEN III
13	AT 5
14	AT 10 GEN III
15	AT 10
16	ATP 10 GEN III
17	ATP 10
18	ATP 15
19	AT 20

## T standard Timing Belts

20	T 2
21	T 2,5/T 2,5-DL
22	T 5/T 5-DL
23	T 10/T 10-DL
24	T 20/T 20-DL

## Imperial Timing Belts

25	M (MXL)
----	---------

## F Flat Belts

26	F/AF/BF/CF/DF
----	---------------

## Timig Belts with special tooth profiles

27	K 1/K 1,5
28	V (incl. Imperial)

# SYNCHROFLEX® Timing Belts

## Manufacturing processes

SYNCHROFLEX® Timing Belts consist of two components, a polyurethane, and a high grade steel cord tension member. The excellent bond between the two materials results in high power transmission capacity.

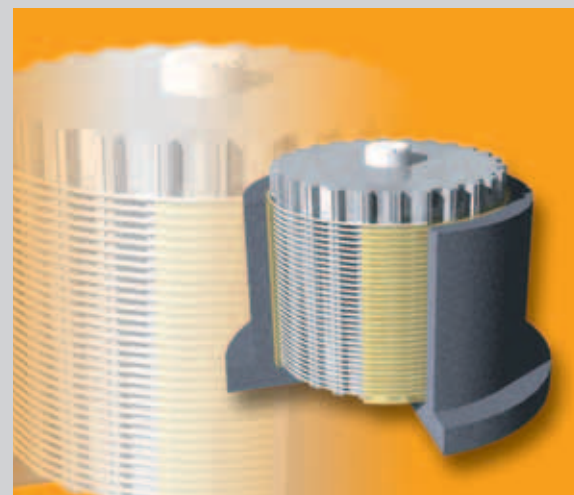
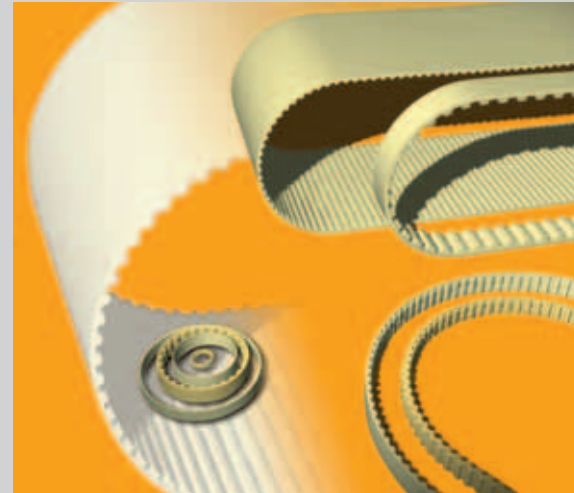
**The manufacturing process in moulds – the displacement moulding – combines the following advantages:**

- The cast polyurethane timing belt is a precise image of its shape. A high pitch accuracy is reached for the whole belt. For this reason, it is particularly suitable for angular accuracy, smooth running and high rotational speeds.
- Low length tolerance. The tolerance situation can be influenced by changing the cord tension.
- Due to the casting method and because of the capillary effect, good bonding with the steel cord tension members.
- High image quality of the cast polyurethane. Fine contours can be moulded exactly. Especially suitable for small pitches. DL meshing and profile flights on the back of the belt can be moulded at the same time.
- The de-moulded timing belt sleeve has a mould-related overall useful width of up to 300 mm.
- Belt lengths from 55 to 6,000 mm endless length.

SYNCHROFLEX® Polyurethane Timing Belts are used in all technical fields where synchronous transmission of a rotary movement is required. Independent, whether power transmission, servo control functions or switching and conveying tasks are required. They operate in a rotational speed range of up to 20,000 rpm.

**Preferred application fields:**

- Office machinery
- EDP equipment
- Textile machinery
- Wood processing machinery
- Machine tools
- Printing machinery
- Pumps
- Compressors
- Building machinery



Casting mould, illustrated with a spirally wound tension member on the mould core



Ready de-moulded timing belt sleeve, part of it separated into individual belts

## The Construction

SYNCHROFLEX® Timing Belts are manufactured of wear resistant polyurethane and high tensile steel cord tension members. Both high quality materials combined form the basis for dimensionally stable and high resistance polyurethane timing belts. Polyurethane timing belts have a very high span rigidity. No post-elongation of the tension members is to be expected in continuous operation. Only under extreme load and after a short running time, the pretension of the belts might slightly reduce by the tension members settling, making a once-only re-tensioning of the timing belt eventually necessary. The timing belts are temperature resistant with ambient temperatures from -30°C to +80°C. Applications close to the limit temperatures (< -10°C and > +50°C), however, might require adapted dimensioning. For specific temperature ranges various belt materials are available, e.g. the SYNCHROFLEX® Timing Belt GEN III is temperature resistant up to 100°C. Please contact our specialists for this type of application.



The production methods according to which SYNCHROFLEX® Timing Belts are produced, allow keeping within tight tolerances which guarantee a uniform load distribution during power transmission. These polyurethane timing belts are suitable for the transmission of high torques as well as the precise positioning and transport of various goods.

### Properties:

#### mechanical

- positive fit, synchronous run
- constant length, no post-elongation
- low noise
- wear resistant
- low-maintenance
- highly flexible
- positional and angular accuracy
- fatigue resistant, low extension steelcord tension members
- Beltspeed up to 80 ms<sup>-1</sup>
- small build sizes
- favourable power-to-weight ratio
- low pre-tension
- low bearing load
- permits large centre distances
- permits large transmission ratios
- high degree of efficiency, max. 98%

#### chemical

- hydrolysis resistant
- resistant to aging
- temperature resistant from -30° to +80°C, design SYNCHROFLEX® Timing Belt GEN III up to 100°C (see information in the text "Construction")
- tropical climate resistant
- resistant against simple oils, fats and petrol
- resistant to some acids and alkalines

For further information about the resistance of polyurethane Timing Belts please contact your sales partner.

# Antistatic SYNCHROFLEX® Timing Belts

## SYNCHROFLEX® Timing Belts antistatic

The antistatic properties of SYNCHROFLEX® Timing Belts are achieved by:

**1. antistatic coating**

post-process application of an electrically conductive coat on all sides of the belts with and without textile facing

**2. antistatic PU-Mixture**

a special conductive polyurethane mix (max. belt length 700 mm)

other lengths on request

Colour of antistatic timing belts: black.

Surface resistance  $R \leq 10^6 \Omega$

**Application / Use**

Antistatic SYNCHROFLEX® Timing Belts find their application where electrostatic charges are not desired or inadmissible, e.g. for the transport of electronic components, drives and/or conveying equipment in an inflammable environment.

**Electrostatic charges**

Electric charges due to the continual separation of two contact surfaces can be expected where timing belts are involved, e. g. pulley and timing belt. This electric charge can be considerable and as high as implying the danger of ignition at the moment of its discharge. The value of the electric charge depends on the materials out of which timing belt, synchronous pulley, tension roller and/or support roller are manufactured. It rises as the belt speed, belt pretension and the contact surface width increase.

**Antistatic properties**

Antistatic SYNCHROFLEX® Timing Belts reliably avoid the formation of electric charges. According to DIN 22104 "Antistatic conveyor belts", the surface resistance must be below  $3 \cdot 10^8 \Omega$ . Antistatic Synchroflex® timing belts feature a surface resistance of  $R \leq 10^6 \Omega$ .

**Quality assurance**

Conductivity is measured using flexible electrodes meeting ISO 9563 requirements. Upon request, the wear resistance of the antistatic layer is checked on a test belt for timing belts with antistatic facing. If the wear resistance test reveals a surface resistance of  $R \leq 10^6 \Omega$ , a sufficiently high wear resistance and/or conductivity are guaranteed. Due to the fact that during extended operation and possible wear the conductivity of the antistatic timing belts can deteriorate, regular checks of the resistance values are indispensable. When belts are to be used in explosion endangered environments, please contact our technical support for advice.

**Ordering examples**

SYNCHROFLEX® Timing Belt 25 T 5/630 antistatic coated

For available lengths, please ask for our technical support

# The "E" tension member

## Highly flexible tension inserts – the "E" steel cord tension member

The thinner the single wire, the more flexible the overall tension member! This interrelation led us to develop SYNCHROFLEX® Timing Belts with "E" tension members.

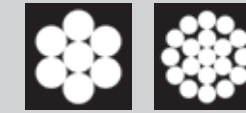
In the "E" tension member the tension member cross-section is distributed to a lot more thin individual wires and, therefore, the bending fatigues are markedly lower in the individual wires. The advantage of the "E" tension members is a higher flexibility. This is especially important, when smaller mounting dimensions for pulleys and tension rollers are required. The minimum number of teeth and/or minimum diameter of the pulleys can be fallen below up to 30% compared with standard tension members. Timing belts with "E" tension members are recommended for multi-shaft drive with frequent bends.

**Summary:**

- thinner individual wires in the steel cord
- higher dynamic capabilities
- extremely high bonding and bending fatigue strength
- smaller pulley and tension roller diameter
- no correction of the synchronising pulleys are necessary

Application information: For intended application under extreme conditions please contact our technical department for advise.

Steel cord tension members encapsulated in polyurethane:



The thinner the individual wire the more flexible the whole timing belt

**Available versions:**

- for the pitches AT 3 (standard), AT 5 (Gen III standard), AT 10, ATP10, T 5, T 10, T 20
- Belt lengths respectively to the delivery range
- Synchronising pulleys respectively to the delivery range
- Calculation analog to the standard tension member

**Timing belts with "E" tension members, minimum numbers of teeth:**

Drive type		AT 3 (Standard)	AT 5 (GEN III Standard)	AT 10 ATP 10	T 5	T 10	T 20
without contraflexure 	Synchronising pulley $z_{min}$	15	12	12	10	10	12
	Tension roller (smooth), running on teeth $d_{min}$ [mm]	20	18	50	18	50	80
with contraflexure 	Synchronising pulley $z_{min}$	20	20	20	12	15	20
	Tension roller (smooth), running on the back of the belt $d_{min}$ [mm]	20	50	80	18	50	120

# The new GEN III

## SYNCHROFLEX® Timing Belt (SFX) AT GEN III / ATP GEN III

### A powerful basis

The combination of high tensile steel cord tension members and wear resistant polyurethane forms the basis for dimensionally stable and high resistant polyurethane timing belts. A technology convincing with excellent product properties.

- constant length, no post-elongation
- high dimensional stability
- Transmission of high torques
- quiet running
- maintenance-free
- no timing belt lubrication
- high resistance against mechanical and chemical influences

### Each generation is different. GEN III is better!

The intensive development work on the SYNCHROFLEX® Timing Belts of the AT and ATP series emphasizing on the power drives has proven successful, because an increase in power transmission of up to 25% of the new generation compared to the AT/ATP standard could be achieved. A further economical plus: All SYNCHROFLEX® Timing Belts GEN III are suitable for application with standard AT/ATP synchronising pulleys.

For all sales partners progress means to provide the best possible solution for each product down to the smallest technical detail. This is achieved for the new SYNCHROFLEX® GEN III of the AT and ATP series by the use of a two-filament tension member arrangement and with a higher density.

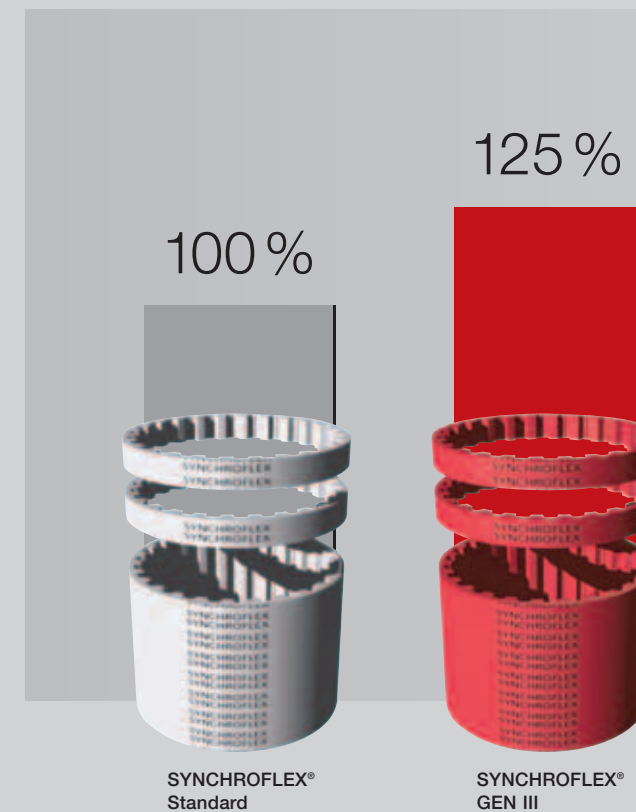
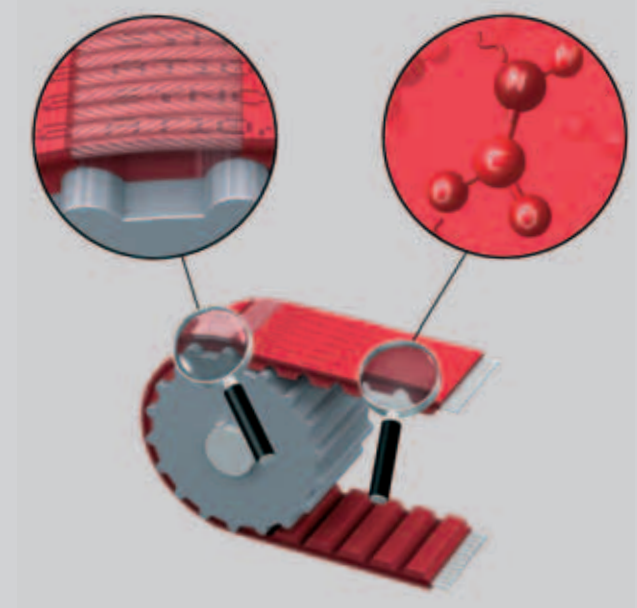
The new high performance polyurethane is distinguished by numerous performance improvements. Thus, amongst others, it is possible to consider a higher number of load bearing teeth in the calculation by an increased hardness.

### SYNCHROFLEX® GEN III – a higher power transmission of up to 25% compared to the AT/ATP standard:

- due to closer wound cords  $F_{adm}$  to max. +45%
- strongly reduced running force to flange/optimised straight run due to two-filament tension members and balanced twist direction in S and Z design
- reduced friction at the flange
- minimised running noise with reduced belt width and equal performance
- $F_{spec}$  +25%
- longer lifetime
- Circumferential force distribution to a number of load bearing teeth increased by up to 30%
- Application up to 100°C  
(for performance values in the limit range please contact us)

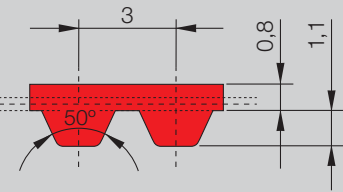
Two-filament  
tension member  
arrangement

New high  
performance  
polyurethane



# AT high performance Timing Belts

## AT 3 GEN III



SYNCHROFLEX® Timing Belt (SFX) AT 3 GEN III

High performance AT profile with metric pitches and trapezoidal teeth

**Standard version:**

- single-sided
- High performance polyurethane in red colour
- Steel cord tension members with high density
- Steel cord tension members in two-filament construction
- Steel cord tension members in highly flexible construction

**FA:** with enlarged back of the belt

**FN:** with profiles on the back of the belt

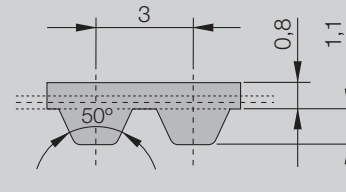
Type / Length* GEN III	Number of teeth
AT 3 / 150	50
AT 3 / 201	67
AT 3 / 201 FN68	67
AT 3 / 252	84
AT 3 / 267	89
AT 3 / 270	90
AT 3 / 300	100
AT 3 / 351	117
AT 3 / 399	133
AT 3 / 417	139
AT 3 / 450	150
AT 3 / 486 FN18	162
AT 3 / 501	167
AT 3 / 549	183
AT 3 / 600	200
AT 3 / 639	213
AT 3 / 648	216
AT 3 / 648 FN24	216

Preferred belt width\* in mm:  
6, 10, 16, 25, 32

Type / Length* GEN III	Number of teeth
AT 3 / 816	272
AT 3 / 816 FA	272
AT 3 / 900	300
AT 3 / 1011	337

\* Other dimensions upon request.

## AT 3



SYNCHROFLEX® Timing Belt (SFX) AT 3

High performance AT profile with metric pitches and trapezoidal teeth

**Available versions:**

- single-sided
- with reinforced design
- with Aramid tension member
- Polyurethane special materials upon request
- antistatic, coloured, mechanical reworked

**FA:** with enlarged back of the belt

**FN:** with profiles on the back of the belt

Type / Length* GEN III	Number of teeth
AT 3 / 150	50
AT 3 / 201	67
AT 3 / 201 FN68	67
AT 3 / 252	84
AT 3 / 267	89
AT 3 / 270	90
AT 3 / 300	100
AT 3 / 351	117
AT 3 / 399	133
AT 3 / 417	139
AT 3 / 450	150
AT 3 / 486 FN18	162
AT 3 / 501	167
AT 3 / 549	183
AT 3 / 600	200
AT 3 / 639	213
AT 3 / 648	216
AT 3 / 648 FN24	216

Preferred belt width\* in mm:  
6, 10, 16, 25, 32

Type / Length* GEN III	Number of teeth
AT 3 / 816	272
AT 3 / 816 FA	272
AT 3 / 900	300
AT 3 / 1011	337

\* Other dimensions upon request.

**Order example**

SYNCHROFLEX® Timing Belt 10 AT3/450 GEN III

Belt width in mm \_\_\_\_\_

Type/Pitch \_\_\_\_\_

Belt length in mm \_\_\_\_\_

Specification Generation III \_\_\_\_\_

**Order example**

SYNCHROFLEX® Timing Belt 10 AT3/450

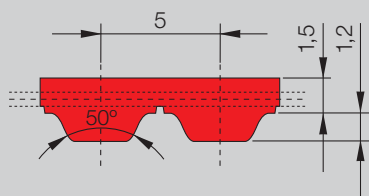
Belt width in mm \_\_\_\_\_

Type/Pitch \_\_\_\_\_

Belt length in mm \_\_\_\_\_

# AT high performance Timing Belts

## AT 5 GEN III



SYNCHROFLEX® Timing Belt (SFX) AT 5 GEN III

High performance AT profile with metric pitches and trapezoidal teeth

**Standard version:**

- single-sided
- High performance polyurethane in red colour
- Steel cord tension members with high density
- Steel cord tension members in two-filament construction
- Steel cord tension members in highly flexible construction

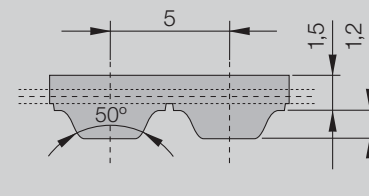
**FA:** with enlarged back of the belt

Type / Length* GEN III	Number of teeth	Type / Length* GEN III	Number of teeth
AT 5 / 225	45	AT 5 / 720	144
AT 5 / 255	51	AT 5 / 750	150
AT 5 / 260	52	AT 5 / 780	156
AT 5 / 280	56	AT 5 / 825	165
AT 5 / 300	60	AT 5 / 860	172
AT 5 / 330	66	AT 5 / 875	175
AT 5 / 340	68	AT 5 / 900	180
AT 5 / 375	75	AT 5 / 920	184
AT 5 / 390	78	AT 5 / 975	195
AT 5 / 420	84	AT 5 / 1050	210
AT 5 / 450	90	AT 5 / 1125	225
AT 5 / 455	91	AT 5 / 1230	246
AT 5 / 480	96	AT 5 / 1500	300
AT 5 / 490	98	AT 5 / 1750	350
AT 5 / 500	100	AT 5 / 2000	400
AT 5 / 525	105	AT 5 / 3350 FA**	670
AT 5 / 545	109	AT 5 / 3800 FA**	760
AT 5 / 600	120		
AT 5 / 610	122		
AT 5 / 620	124		
AT 5 / 630	126		
AT 5 / 660	132		
AT 5 / 670	134		
AT 5 / 690	138		
AT 5 / 710	142		

Preferred belt width\* in mm:  
6, 10, 16, 25, 32, 50, 75, 100

\* Other dimensions upon request  
\*\* please ask for technical support

## AT 5



SYNCHROFLEX® Timing Belt (SFX) AT 5

High performance AT profile with metric pitches and trapezoidal teeth

**Available versions:**

- single-sided
- with "E" tension member for a better flexibility
- with reinforced design
- with Aramid tension member
- Polyurethane special materials upon request
- antistatic, coloured, mechanical reworked

**FA:** with enlarged back of the belt

Type / Length* GEN III	Number of teeth	Type / Length* GEN III	Number of teeth
AT 5 / 225	45	AT 5 / 720	144
AT 5 / 255	51	AT 5 / 750	150
AT 5 / 260	52	AT 5 / 780	156
AT 5 / 280	56	AT 5 / 825	165
AT 5 / 300	60	AT 5 / 860	172
AT 5 / 330	66	AT 5 / 875	175
AT 5 / 340	68	AT 5 / 900	180
AT 5 / 375	75	AT 5 / 920	184
AT 5 / 390	78	AT 5 / 975	195
AT 5 / 420	84	AT 5 / 1050	210
AT 5 / 450	90	AT 5 / 1125	225
AT 5 / 455	91	AT 5 / 1230	246
AT 5 / 480	96	AT 5 / 1500	300
AT 5 / 490	98	AT 5 / 1750	350
AT 5 / 500	100	AT 5 / 2000	400
AT 5 / 525	105	AT 5 / 3350 FA**	670
AT 5 / 545	109	AT 5 / 3800 FA**	760
AT 5 / 600	120		
AT 5 / 610	122		
AT 5 / 620	124		
AT 5 / 630	126		
AT 5 / 660	132		
AT 5 / 670	134		
AT 5 / 690	138		
AT 5 / 710	142		

Preferred belt width\* in mm:  
10, 16, 25, 32, 50

\* Other dimensions upon request  
\*\* please ask for technical support

**Order example**

SYNCHROFLEX® Timing Belt 50 AT5 / 450 GEN III

Belt width in mm \_\_\_\_\_

Type/Pitch \_\_\_\_\_

Belt length in mm \_\_\_\_\_

Specification Generation III \_\_\_\_\_

**Order example**

SYNCHROFLEX® Timing Belt 10 AT5 / 450

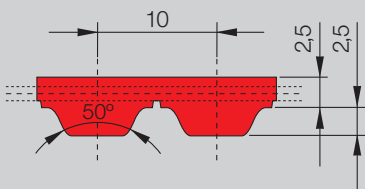
Belt width in mm \_\_\_\_\_

Type/Pitch \_\_\_\_\_

Belt length in mm \_\_\_\_\_

# AT high performance Timing Belts

## AT 10 GEN III



SYNCHROFLEX® Timing Belt (SFX) AT 10 GEN III

High performance AT profile with metric pitches and trapezoidal teeth

**Standard version:**

- single-sided
- High performance polyurethane in red colour
- Steel cord tension members with high density
- Steel cord tension members in two-filament construction

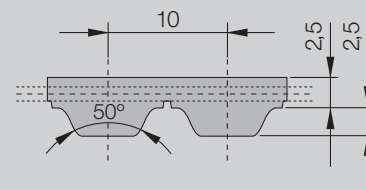
**FN:** with profiles on the back of the belt

Type / Length* GEN III	Number of teeth	Type / Length* GEN III	Number of teeth
AT 10 / 440	44	AT 10 / 1150	115
AT 10 / 460	46	AT 10 / 1200	120
AT 10 / 500	50	AT 10 / 1210	121
AT 10 / 560	56	AT 10 / 1250	125
AT 10 / 570	57	AT 10 / 1280	128
AT 10 / 580	58	AT 10 / 1300	130
AT 10 / 600	60	AT 10 / 1320	132
AT 10 / 610	61	AT 10 / 1350	135
AT 10 / 660	66	AT 10 / 1360	136
AT 10 / 700	70	AT 10 / 1360 FN2	136
AT 10 / 730	73	AT 10 / 1400	140
AT 10 / 780	78	AT 10 / 1480	148
AT 10 / 800	80	AT 10 / 1500	150
AT 10 / 840	84	AT 10 / 1600	160
AT 10 / 840 FN2	84	AT 10 / 1700	170
AT 10 / 880	88	AT 10 / 1720	172
AT 10 / 890	89	AT 10 / 1800	180
AT 10 / 920	92	AT 10 / 1800 FN4	180
AT 10 / 960	96	AT 10 / 1860	186
AT 10 / 980	98	AT 10 / 1940	194
AT 10 / 1000	100	AT 10 / 2910 FN2	291
AT 10 / 1010	101	AT 10 / 2910 FN79	291
AT 10 / 1050	105		
AT 10 / 1080	108		
AT 10 / 1100	110		

Preferred belt width\* in mm:  
16, 25, 32, 50, 75, 100, 150

\* Other dimensions upon request.

## AT 10



SYNCHROFLEX® Timing Belt (SFX) AT 10

High performance AT profile with metric pitches and trapezoidal teeth

**Available versions:**

- single-sided
- with "E" tension member for a better flexibility
- with reinforced design
- with Aramid tension member
- Polyurethane special materials upon request
- antistatic, coloured, mechanical reworked

**FN:** with profiles on the back of the belt

Type / Length*	Number of teeth	Type / Length*	Number of teeth
AT 10 / 440	44	AT 10 / 1150	115
AT 10 / 460	46	AT 10 / 1200	120
AT 10 / 500	50	AT 10 / 1210	121
AT 10 / 560	56	AT 10 / 1250	125
AT 10 / 570	57	AT 10 / 1280	128
AT 10 / 580	58	AT 10 / 1300	130
AT 10 / 600	60	AT 10 / 1320	132
AT 10 / 610	61	AT 10 / 1350	135
AT 10 / 660	66	AT 10 / 1360	136
AT 10 / 700	70	AT 10 / 1360 FN2	136
AT 10 / 730	73	AT 10 / 1400	140
AT 10 / 780	78	AT 10 / 1480	148
AT 10 / 800	80	AT 10 / 1500	150
AT 10 / 840	84	AT 10 / 1600	160
AT 10 / 840 FN2	84	AT 10 / 1700	170
AT 10 / 880	88	AT 10 / 1720	172
AT 10 / 890	89	AT 10 / 1800	180
AT 10 / 920	92	AT 10 / 1800 FN4	180
AT 10 / 960	96	AT 10 / 1860	186
AT 10 / 980	98	AT 10 / 1940	194
AT 10 / 1000	100	AT 10 / 2910 FN2	291
AT 10 / 1010	101	AT 10 / 2910 FN79	291
AT 10 / 1050	105		
AT 10 / 1080	108		
AT 10 / 1100	110		

Preferred belt width\* in mm:  
16, 25, 32, 50, 75, 100

\* Other dimensions upon request.

**Order example**

SYNCHROFLEX® Timing Belt 32 AT10/800 GEN III

Belt width in mm \_\_\_\_\_

Type/Pitch \_\_\_\_\_

Belt length in mm \_\_\_\_\_

Specification Generation III \_\_\_\_\_

**Order example**

SYNCHROFLEX® Timing Belt 32 AT10/800

Belt width in mm \_\_\_\_\_

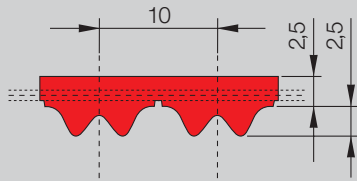
Type/Pitch \_\_\_\_\_

Belt length in mm \_\_\_\_\_



# ATP high performance Timing Belts

## ATP 10 GEN III



SYNCHROFLEX® Timing Belt (SFX) ATP 10 GEN III

High performance ATP profile with metric pitch and optimised meshing with a double support of the tooth head.

### Standard version

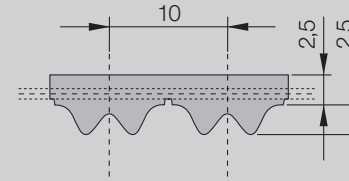
- single-sided
- High performance polyurethane in red colour
- Steel cord tension members with high density
- Steel cord tension members in two-filament construction

Type / Length* GEN III	Number of teeth	Type / Length* GEN III	Number of teeth
ATP 10/ 630	63	ATP 10/ 1280	128
ATP 10/ 660	66	ATP 10/ 1400	140
ATP 10/ 700	70	ATP 10/ 1650	165
ATP 10/ 780	78	ATP 10/ 1760**	176
ATP 10/ 840	84	ATP 10/ 1800	180
ATP 10/ 890	89		
ATP 10/ 920	92		
ATP 10/ 1010	101		
ATP 10/ 1080	108		
ATP 10/ 1150	115		

Preferred belt width\* in mm:  
16, 25, 32, 50, 75, 100, 150

\* Other dimensions upon request.  
\*\* in preparation

## ATP 10



SYNCHROFLEX® Timing Belt (SFX) ATP 10

High performance ATP profile with metric pitch and optimised meshing with a double support of the tooth head.

### Available versions:

- single-sided
- with "E" tension member for a better flexibility
- with reinforced tension member design
- Polyurethane special materials upon request (Standard: 93ShA, colour: yellow)
- antistatic, coloured, mechanical reworked

Type / Length* GEN III	Number of teeth	Type / Length* GEN III	Number of teeth
ATP 10/ 630	63	ATP 10/ 1280	128
ATP 10/ 660	66	ATP 10/ 1400	140
ATP 10/ 700	70	ATP 10/ 1650	165
ATP 10/ 780	78	ATP 10/ 1760**	176
ATP 10/ 840	84	ATP 10/ 1800	180
ATP 10/ 890	89		
ATP 10/ 920	92		
ATP 10/ 1010	101		
ATP 10/ 1080	108		
ATP 10/ 1150	115		

Preferred belt width\* in mm:  
16, 25, 32, 50, 75, 100

\* Other dimensions upon request.  
\*\* in preparation

### Order example

SYNCHROFLEX® Timing Belt 32 ATP10/780 GEN III

Belt width in mm \_\_\_\_\_

Type/Pitch \_\_\_\_\_

Belt length in mm \_\_\_\_\_

Specification Generation III \_\_\_\_\_

### Order example

SYNCHROFLEX® Timing Belt 32 ATP10/780

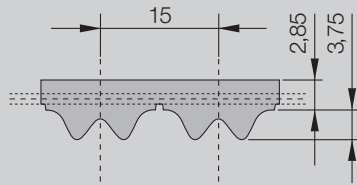
Belt width in mm \_\_\_\_\_

Type/Pitch \_\_\_\_\_

Belt length in mm \_\_\_\_\_

# ATP high performance Timing Belts

## ATP 15



SYNCHROFLEX® Timing Belt (SFX) ATP 15

High performance ATP profile with metric pitch and optimised meshing with a double support of the tooth head.

**Available versions:**

- single-sided
- with "E" tension member for a better flexibility
- with reinforced tension member design
- Polyurethane special materials upon request (Standard: 93ShA, colour: yellow)
- antistatic, coloured, mechanical reworked

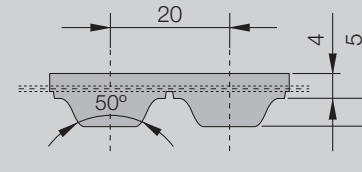
Type / Length*	Number of teeth	Type / Length*	Number of teeth
ATP 15/ 990**	66	ATP 15/ 1560	104
ATP 15/ 1125	75		
ATP 15/ 1185	79		
ATP 15/ 1260	84		
ATP 15/ 1395**	93		

Preferred belt width\* in mm:  
25, 32, 50, 75, 100, 150

\* Other dimensions upon request.  
\*\* dimensions in preparation

# AT high performance Timing Belts

## AT 20



SYNCHROFLEX® Timing Belt (SFX) AT 20

High performance AT profile with metric pitches and trapezoidal teeth

**Available versions:**

- single-sided
- Polyurethane special materials upon request
- antistatic, coloured, mechanical reworked

Type / Length*	Number of teeth	Type / Length*	Number of teeth
AT 20 / 1000**	50	AT 20 / 1960**	98
AT 20 / 1100	55		
AT 20 / 1200**	60		
AT 20 / 1260	63		
AT 20 / 1500**	75		
AT 20 / 1600**	80		
AT 20 / 1700	85		
AT 20 / 1760**	88		
AT 20 / 1800	90		
AT 20 / 1900**	95		

Preferred belt width\* in mm:  
32, 50, 75, 100

\* Other dimensions upon request.  
\*\* in combination with reduced pulley gap please ask for technical support

**Order example**

SYNCHROFLEX® Timing Belt 32 ATP15/1260

Belt width in mm \_\_\_\_\_

Type/Pitch \_\_\_\_\_

Belt length in mm \_\_\_\_\_

**Order example**

SYNCHROFLEX® Timing Belt 50 AT20/1500

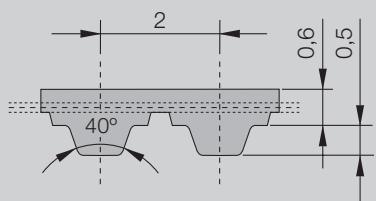
Belt width in mm \_\_\_\_\_

Type/Pitch \_\_\_\_\_

Belt length in mm \_\_\_\_\_

# T standard Timing Belts

## T 2



SYNCHROFLEX® Timing Belt (SFX) T 2

Standard T profile with metric pitch and trapezoidal teeth.

**Available versions:**

- single-sided
- with Aramid tension member
- Polyurethane special materials upon request
- antistatic, coloured, mechanical reworked

**FA:** with enlarged back of the belt

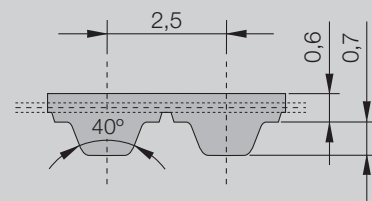
**FN:** with profiles on the back of the belt

Type / Length*	Number of teeth	Type / Length*	Number of teeth
T 2 / 68	34	T 2 / 220 FN2	110
T 2 / 90	45	T 2 / 240	120
T 2 / 108	54	T 2 / 256	128
T 2 / 118	59	T 2 / 262	131
T 2 / 120	60	T 2 / 280	140
T 2 / 120 FA	60	T 2 / 292	146
T 2 / 138	69	T 2 / 320	160
T 2 / 140	70	T 2 / 360	180
T 2 / 144	72	T 2 / 600	300
T 2 / 150	75	T 2 / 710	355
T 2 / 160	80	T 2 / 710 FA	355
T 2 / 180	90		
T 2 / 200	100		
T 2 / 220	110		
T 2 / 220 FA	110		

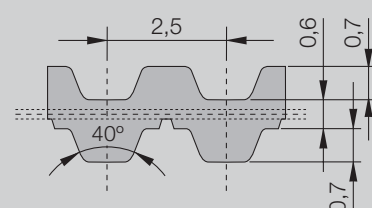
Preferred belt width\* in mm:  
4, 6, 10

\* Other dimensions upon request.

## T 2,5 / T 2,5-DL



SYNCHROFLEX® Timing Belt (SFX) T 2,5



SYNCHROFLEX® Timing Belt (SFX) T 2,5-DL

Standard T profile according to DIN 7721 with metric pitch and trapezoidal teeth.

**Available versions:**

- single-sided (as standard)
- with Aramid tension member
- Polyurethane special materials upon request
- antistatic, coloured, mechanical reworked

**DL:** double-sided

**FA:** with enlarged back of the belt

**FN:** with profiles on the back of the belt

Type / Length*	Number of teeth	Type / Length*	Number of teeth
T 2,5 / 55	22	T 2,5 / 317,5 DL	127
T 2,5 / 120	48	T 2,5 / 330	132
T 2,5 / 145	58	T 2,5 / 380	152
T 2,5 / 160	64	T 2,5 / 395	158
T 2,5 / 160 FA	64	T 2,5 / 400 FA	160
T 2,5 / 177,5	71	T 2,5 / 415 DL	166
T 2,5 / 180	72	T 2,5 / 420	168
T 2,5 / 182,5	73	T 2,5 / 420 FA	168
T 2,5 / 200	80	T 2,5 / 420 FN168	168
T 2,5 / 210 FA	84	T 2,5 / 457,5 DL	183
T 2,5 / 210 FN28	84	T 2,5 / 480	192
T 2,5 / 220 FN3	88	T 2,5 / 500	200
T 2,5 / 225	90	T 2,5 / 540	216
T 2,5 / 230	92	T 2,5 / 540 FA	216
T 2,5 / 230 FA	92	T 2,5 / 600	240
T 2,5 / 245	98	T 2,5 / 600 FA	240
T 2,5 / 250	100	T 2,5 / 620	248
T 2,5 / 265	106	T 2,5 / 650	260
T 2,5 / 285	114	T 2,5 / 650 FN2	260
T 2,5 / 285 FA	114	T 2,5 / 780	312
T 2,5 / 290	116	T 2,5 / 950	380
T 2,5 / 305	122	T 2,5 / 1300	520
T 2,5 / 305 FA	122	T 2,5 / 1300 FA	520
T 2,5 / 305 FN1	122	T 2,5 / 1350 FA	540
T 2,5 / 317,5	127	T 2,5 / 1475 FA	590

Preferred belt width\* in mm:  
4, 6, 10

\* Other dimensions upon request.

**Order example**

SYNCHROFLEX® Timing Belt 6 T2/240

Belt width in mm \_\_\_\_\_

Type/Pitch \_\_\_\_\_

Belt length in mm \_\_\_\_\_

**Order example**

SYNCHROFLEX® Timing Belt 10 T2,5/380

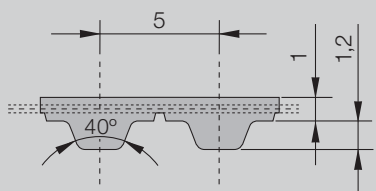
Belt width in mm \_\_\_\_\_

Type/Pitch \_\_\_\_\_

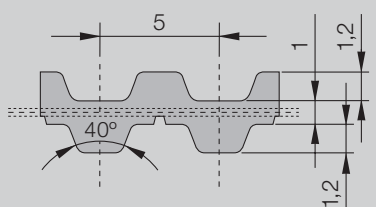
Belt length in mm \_\_\_\_\_

# T standard Timing Belts

## T 5/T 5-DL



SYNCHROFLEX® Timing Belt (SFX) T 5



SYNCHROFLEX® Timing Belt (SFX) T 5-DL

Standard T profile according to DIN 7721 with metric pitch and trapezoidal teeth.

**Available versions:**

- single-sided (as standard)
- with "E" tension member for a better flexibility
- with Aramid tension member
- Polyurethane special materials upon request
- antistatic, coloured, mechanical reworked

**DL:** double-sided

**FA:** with enlarged back of the belt

**FN:** with profiles on the back of the belt

Type / Length*	Number of teeth	Type / Length*	Number of teeth
T 5 / 100	20	T 5 / 620	124
T 5 / 150	30	T 5 / 620 DL	124
T 5 / 150 DL	30	T 5 / 625 DL	125
T 5 / 165	33	T 5 / 630	126
T 5 / 180	36	T 5 / 630 FA	126
T 5 / 185	37	T 5 / 650	130
T 5 / 200	40	T 5 / 650 FA	130
T 5 / 210	42	T 5 / 660	132
T 5 / 215	43	T 5 / 690	138
T 5 / 220	44	T 5 / 690 FA	138
T 5 / 225	45	T 5 / 700	140
T 5 / 245	49	T 5 / 720	144
T 5 / 250	50	T 5 / 725	145
T 5 / 255	51	T 5 / 750	150
T 5 / 260	52	T 5 / 750 DL	150
T 5 / 260 DL	52	T 5 / 765	153
T 5 / 270	54	T 5 / 780	156
T 5 / 280	56	T 5 / 800	160
T 5 / 295	59	T 5 / 815	163
T 5 / 300 DL	60	T 5 / 815 DL	163
T 5 / 305	61	T 5 / 840	168
T 5 / 330	66	T 5 / 840 DL	168
T 5 / 340	68	T 5 / 860	172
T 5 / 355	71	T 5 / 860 DL	172
T 5 / 365	73	T 5 / 900	180
T 5 / 390	78	T 5 / 920	184
T 5 / 400	80	T 5 / 925	185
T 5 / 410	82	T 5 / 940	188
T 5 / 410 DL	82	T 5 / 940 DL	188
T 5 / 420	84	T 5 / 990	198
T 5 / 455	91	T 5 / 990 FA	198
T 5 / 460	92	T 5 / 1075	215
T 5 / 460 DL	92	T 5 / 1075 FA	215
T 5 / 480	96	T 5 / 1100	220
T 5 / 500	100	T 5 / 1100 DL	220
T 5 / 505	101	T 5 / 1140	228
T 5 / 510	102	T 5 / 1160	232
T 5 / 515 DL	103	T 5 / 1160 FA	232
T 5 / 525	105	T 5 / 1215	243
T 5 / 525 FA	105	T 5 / 1315	263
T 5 / 525 DL	105	T 5 / 1325 DL	265
T 5 / 545	109	T 5 / 1350 FN	270
T 5 / 550	110	T 5 / 1380	276
T 5 / 560	112	T 5 / 1440 FA	288
T 5 / 575	115	T 5 / 1500	300
T 5 / 590	118	T 5 / 1500 FA	300
T 5 / 590 DL	118	T 5 / 1525 FN	305
T 5 / 600 FN	120		
T 5 / 610	122		
T 5 / 615 FN	123		

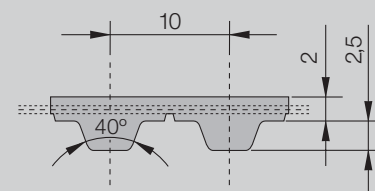
Preferred belt width\* in mm:  
6, 10, 16, 25, 50

\* Other dimensions upon request.

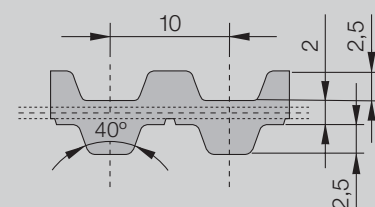
**Order example**

SYNCHROFLEX® Timing Belt 10 T5/455  
 Belt width in mm \_\_\_\_\_  
 Type/Pitch \_\_\_\_\_  
 Belt length in mm \_\_\_\_\_

## T 10/T 10-DL



SYNCHROFLEX® Timing Belt (SFX) T 10



SYNCHROFLEX® Timing Belt T (SFX) 10-DL

Standard T profile according to DIN 7721 with metric pitch and trapezoidal teeth.

**Available version**

- single-sided (as standard)
- with "E" tension member for a better flexibility
- with Aramid tension member
- Polyurethane special materials upon request
- antistatic, coloured, mechanical reworked

**DL:** double-sided

**FA:** with enlarged back of the belt

**FN:** with profiles on the back of the belt

Type / Length*	Number of teeth	Type / Length*	Number of teeth
T 10 / 260	26	T 10 / 980 DL	98
T 10 / 260 DL	26	T 10 / 1010	101
T 10 / 350	35	T 10 / 1080	108
T 10 / 370	37	T 10 / 1110	111
T 10 / 410	41	T 10 / 1140	114
T 10 / 410 FA	41	T 10 / 1150	115
T 10 / 420 FN	42	T 10 / 1210	121
T 10 / 440	44	T 10 / 1210 DL	121
T 10 / 450	45	T 10 / 1240	124
T 10 / 500	50	T 10 / 1240 DL	124
T 10 / 530	53	T 10 / 1250	125
T 10 / 530 DL	53	T 10 / 1250 DL	125
T 10 / 560	56	T 10 / 1300	130
T 10 / 600	60	T 10 / 1320	132
T 10 / 610	61	T 10 / 1320 DL	132
T 10 / 630	63	T 10 / 1350	135
T 10 / 630 DL	63	T 10 / 1350 DL	135
T 10 / 660	66	T 10 / 1390	139
T 10 / 660 DL	66	T 10 / 1400	140
T 10 / 680	68	T 10 / 1420	142
T 10 / 690	69	T 10 / 1420 DL	142
T 10 / 700	70	T 10 / 1450	145
T 10 / 720	72	T 10 / 1460	146
T 10 / 720 DL	72	T 10 / 1500	150
T 10 / 730	73	T 10 / 1560	156
T 10 / 750	75	T 10 / 1610	161
T 10 / 760	76	T 10 / 1610 DL	161
T 10 / 780	78	T 10 / 1750	175
T 10 / 800 FN	80	T 10 / 1780	178
T 10 / 810	81	T 10 / 1800 FN	180
T 10 / 840	84	T 10 / 1880	188
T 10 / 840 DL	84	T 10 / 1880 DL	188
T 10 / 850	85	T 10 / 1960	196
T 10 / 880	88	T 10 / 2250	225
T 10 / 890	89	T 10 / 3040 FN	304
T 10 / 920	92	T 10 / 3100	310
T 10 / 960	96	T 10 / 4780	478
T 10 / 970	97	T 10 / 4780 DL**	478
T 10 / 980	98		

Preferred belt width\* in mm:  
16, 25, 32, 50

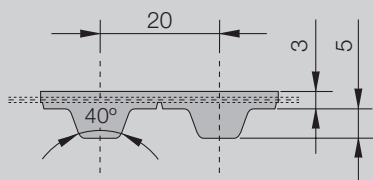
\* Other dimensions upon request.  
 \*\* Request application-dependent informations

**Order example**

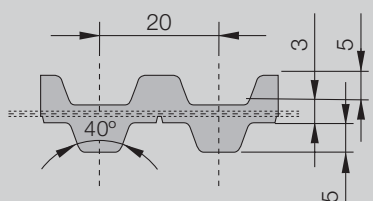
SYNCHROFLEX® Timing Belt 16 T10/260  
 Belt width in mm \_\_\_\_\_  
 Type/Pitch \_\_\_\_\_  
 Belt length in mm \_\_\_\_\_

# T standard Timing Belts

## T 20 / T 20-DL



SYNCHROFLEX® Timing Belt (SFX) T 20



SYNCHROFLEX® Timing Belt (SFX) T 20-DL

Standard T profile according to DIN 7721 with metric pitch and trapezoidal teeth.

**Available versions:**

- single-sided (as standard)
- with "E" tension member for a better flexibility
- with Aramid tension member (except DL)
- Polyurethane special materials upon request
- antistatic, coloured, mechanical reworked

**DL:** double-sided

Type / Length*	Number of teeth	Type / Length*	Number of teeth
T 20 / 1260	63	T 20 / 2600	130
T 20 / 1460	73	T 20 / 2600 DL**	130
T 20 / 1780	89	T 20 / 3100	155
T 20 / 1880	94	T 20 / 3620	181
T 20 / 2360	118	T 20 / 3620 DL***	181

Preferred belt width\* in mm:  
32, 50, 75, 100

\* Other dimensions upon request.

\*\* Request application-depending informations

\*\*\* Only on request

**Order example**

SYNCHROFLEX® Timing Belt 50 T20 / 2600

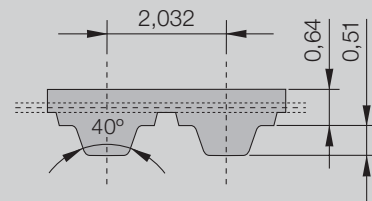
Belt width in mm \_\_\_\_\_

Type/Pitch \_\_\_\_\_

Belt length in mm \_\_\_\_\_

# Imperial Timing Belts

## M (MXL)



SYNCHROFLEX® Timing Belt (SFX) M (MXL)

Standard trapezoidal teeth according to DIN/ISO 5296 with Minipitch (2.032 mm = 0.08 Inch).

**Available versions:**

- single-sided
- with Aramid tension member
- Polyurethane special materials upon request
- antistatic, coloured, mechanical reworked

**FA:** with enlarged back of the belt

**FN:** with profiles on the back of the belt

Type / Length*	Number of teeth	Type / Length*	Number of teeth
M 111 / 111,76	55	M 264 / 264,16	130
M 113 / 113,79	56	M 284 / 284,48	140
M 121 / 121,92	60	M 304 / 304,80	150
M 121 / 121,92 FA	60	M 355 / 355,60	175
M 132 / 132,08	65	M 373 / 373,89	184
M 142 / 142,24	70	M 449 / 449,07	221
M 144 / 144,27	71	M 503 / 503,94	248
M 162 / 162,56	80	M 508 / 508,00 FN50	250
M 182 / 182,88	90	M 520 / 520,19	256
M 197 / 197,10	97	M 599 / 599,44	295
M 203 / 203,20	100	M 731 / 731,52	360
M 209 / 209,30	103	M1178 / 1178,56	580
M 213 / 213,36	105		
M 243 / 243,86	120		
M 256 / 256,03	126		

Preferred belt width\* in mm:  
4, 6, 10

\* Other dimensions upon request.

**Order example**

SYNCHROFLEX® Timing Belt 6 M / 182

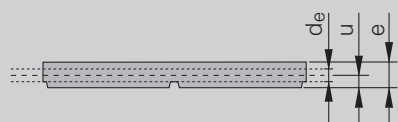
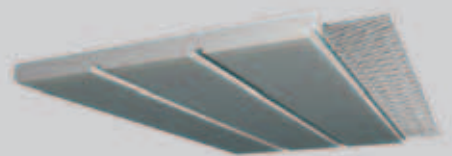
Belt width in mm \_\_\_\_\_

Type/Pitch \_\_\_\_\_

Belt length in mm \_\_\_\_\_

# F Flat Belts

## F / AF / BF / CF / DF



SYNCHROFLEX® Flat Belt (SFX)

Type	Mold No.	Length [mm]	e [mm]	u [mm]	d <sub>e</sub> [mm]
F 213/7	K3969-Z	212,95	1,60	0,800	0,15
F 254/4	K5111-Z	253,74	0,80	0,400	0,15
F 314/5	K5558-Z	314,16	5,50	2,000	0,60
F 315/4	K5428-Z	315,73	1,20	0,600	0,15
F 330/2	K5651-Z	330,00	1,00	0,400	0,15
F 435/2	K5691-Z	435,00	0,80	0,400	0,15
F 502/7	K5430-Z	501,84	1,00	0,500	0,30
F 697/4	52648-Z	695,57	0,55	0,275	0,15
F 738/4	K5112-Z	738,64	0,80	0,400	0,15
F 762/7	K3708-Z	762,00	2,60	1,300	0,30
F 959/2	K5578-Z	959,40	1,00	0,500	0,30
F 1240/10	K5178-Z	1240,00	1,20	0,800	0,60
F 1458/9	K4377-Z	1458,50	2,60	0,450	0,30
F 1780/10	K4667-Z	1780,00	1,40	0,600	0,60
AF 24	51669-Z	113,08	0,80	0,275	0,15
AF 56	51772-Z	263,16	0,80	0,400	0,15
AF 67	51601-Z	315,70	0,70	0,275	0,15
AF 76	39669-Z	357,30	0,80	0,400	0,15
AF 87	38919-Z	409,57	0,85	0,575	0,15
AF 108	39796-Z	508,39	0,70	0,275	0,15
AF 138	39847-Z	649,60	0,80	0,275	0,15
AF 140	40121-Z	659,03	0,60	0,275	0,15
AF 148	39631-Z	695,57	0,80	0,275	0,15
BF 44	38852-Z	345,57	0,90	0,450	0,30
BF 64	38805-Z	501,85	0,90	0,450	0,30
BF 67	38902-Z	525,70	0,90	0,450	0,30
BF 70	39980-Z	548,90	0,90	0,450	0,30
CF 66	38917-Z	828,55	1,40	0,700	0,60
DF 45	39839-Z	282,74	0,90	0,450	0,30
DF 130	51636-Z	815,34	0,90	0,450	0,30
DF 153	39979-Z	959,40	0,90	0,450	0,30

### Order example

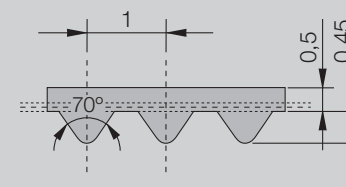
SYNCHROFLEX® Flat Belt 10 AF/108

Belt width in mm

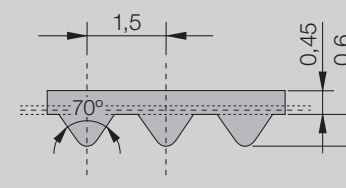
Type/No. of grooves

# Timing Belts with special tooth profiles

## K 1 / K 1,5



SYNCHROFLEX® Timing Belt (SFX) K 1



SYNCHROFLEX® Timing Belt (SFX) K 1,5

Notched profile with a metric pitch.

### Available versions:

- single-sided
- with Aramid tension member
- Polyurethane special materials upon request
- antistatic, coloured, mechanical reworked

Type / Length*	Number of teeth	Type / Length*	Number of teeth
K 1 / 279,0	279	K 1,5 / 400,5	267
K 1 / 348,0	348	K 1,5 / 501,0	334
K 1,5 / 57,0**	38	K 1,5 / 600,0	400
K 1,5 / 64,5**	43	K 1,5 / 1242,5	828
K 1,5 / 67,5**	45	K 1,5 / 1671,5	1114
K 1,5 / 100,5	67		
K 1,5 / 141,0	94		
K 1,5 / 165,0	110		
K 1,5 / 201,0	134		
K 1,5 / 228,0	152		
K 1,5 / 286,0	191		
K 1,5 / 300,0	200		

Preferred belt width\* in mm:  
4, 6, 10

\* Other dimensions upon request.  
\*\* in casting polyurethane 93 ShA, yellow colour

### Order example

SYNCHROFLEX® Timing Belt 6 K1,5/100,5

Belt width in mm

Type/Pitch

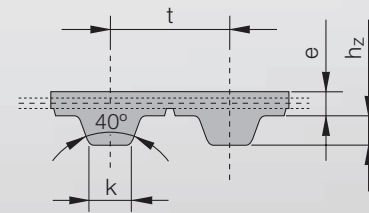
Belt length in mm

# Timing Belts with special tooth profiles and pitch

## V

Type	Imperial pitch	Mold No.	Length l [mm]	Pitch t [mm]	Module m	Number of teeth z	k [mm]	h <sub>z</sub> [mm]	e [mm]
V 100/3	F	K4730-F	100,98	3,060	0,974	33	1,20	0,80	0,70
V 149/4	F	K5870-F	149,49	4,983	1,586	30	1,80	1,20	1,00
V 150/5	F	K3950-F	150,10	5,176	1,648	29	1,60	1,50	1,30
V 158/4	F	K4186-F	158,27	4,522	1,439	35	1,50	1,00	1,20
V 161/5	F	K3961-F	160,68	5,951	1,894	27	2,00	1,50	1,50
V 165/3	F	K3978-F	164,73	3,581	1,140	46	1,00	1,00	1,30
V 167/4	F	K3628-F	167,31	4,522	1,439	37	1,50	1,00	1,20
V 170/4	FA	K4503-FA	169,44	4,459	1,419	38	1,50	1,00	1,00
V 172/4	F	K3880-F	172,24	4,921	1,566	35	1,60	1,50	1,20
V 174/3	F	K5385-F	174,90	3,300	1,050	53	1,00	1,00	1,20
V 177/5	F XL	K5841-F	177,80	5,080	1,617	35	1,20	1,20	0,85
V 190/4	F	K6238-F	192,02	4,572	1,455	42	1,30	1,20	1,40
V 203/5	F XL	K5369-F	203,20	5,080	1,617	40	1,37	1,27	0,80
V 206/6	FK	K4662-FK	206,14	6,063	1,930	34	1,80	1,20	1,00
V 213/7	F	K3969-F	212,46	7,869	2,505	27	2,50	1,40	1,40
V 225/3	F	K6175-F	225,00	3,000	0,955	75	1,20	0,80	0,70
V 226/5	F	K4187-F	226,10	5,950	1,894	38	2,00	1,50	1,50
V 228/6	F	K5290-F	228,60	6,350	2,021	36	2,00	1,50	0,80
V 228/6	FA	K6222-FA	228,60	6,350	2,021	36	2,00	1,50	1,05
V 229/6	F	K3595-F	229,02	6,736	2,144	34	2,00	1,20	1,20
V 233/5	F XL	K5674-F	233,68	5,080	1,617	46	1,37	1,22	1,28
V 238/5	F	K3964-F	238,04	5,951	1,894	40	2,00	1,50	1,10
V 242/5	F	K4088-F	242,40	5,050	1,607	48	1,60	1,50	1,20
V 248/7	F	K3319-F	247,69	7,285	2,319	34	2,50	1,40	1,50
V 252/6	K	K3264-K	252,53	6,475	2,061	39	2,20	1,20	1,80
V 255/6	FK	K4891-FK	255,25	6,717	2,138	38	2,50	1,80	1,00
V 261/7	K	K3251-K	261,59	7,927	2,523	33	2,50	1,40	1,00
V 265/8	F	K3436-F	264,63	8,019	2,553	33	2,50	1,40	1,50
V 268/7	F	K3944-F	268,55	7,258	2,310	37	2,50	1,80	1,50
V 277/3	F	K5386-F	277,20	3,300	1,050	84	1,00	1,00	1,20
V 279/6	F	K6250-F	279,40	6,350	2,021	44	2,00	1,50	1,05
V 284/5	F XL	K5545-F	284,48	5,080	1,617	56	1,80	1,20	0,70
V 285/6	F	K5401-F	285,75	6,350	2,021	45	1,80	1,20	1,00
V 290/3	F	K5388-F	290,40	3,300	1,050	88	1,00	1,00	1,20
V 291/7	F	K3584-F	290,24	7,256	2,310	40	2,50	1,40	1,60
V 295/6	F	K3804-F	294,50	6,266	1,995	47	1,60	1,50	1,50
V 295/6	FA	K4469-FA	294,83	6,273	1,997	47	1,60	1,50	1,50
V 304/5	F XL	K5368-F	304,80	5,080	1,617	60	1,37	1,27	0,60
V 307/5	F	K4031-F	306,92	5,202	1,656	59	1,60	1,50	1,30
V 309/7	FK	K4610-FK	310,72	7,226	2,300	43	2,20	1,60	1,30
V 310/5	F	K3888-F	309,56	5,953	1,895	52	1,80	1,50	1,50
V 316/3	F	K5406-F	316,80	3,300	1,050	96	1,00	1,00	1,20
V 323/3	F	K5098-F	323,40	3,300	1,050	98	1,00	1,00	1,20
V 337/7	F	K3498-F	337,04	7,660	2,438	44	2,50	1,60	1,45
V 341/7	F	K3673-F	340,30	7,734	2,462	44	2,50	2,00	1,40

Type	Imperial pitch	Mold No.	Length l [mm]	Pitch t [mm]	Module m	Number of teeth z	k [mm]	h <sub>z</sub> [mm]	e [mm]
V 350/5	FK	K4909-FK	350,31	5,077	1,616	69	1,80	1,20	1,00
V 351/2	F	K5999-F	351,79	2,645	0,842	133	1,50	1,00	0,60
V 354/6	F	K3653-F	353,82	5,997	1,909	59	2,20	1,40	1,50
V 356/7	F	K3722-F	355,79	7,261	2,311	49	2,50	1,80	1,4
V 357/7	F	K3701-F	356,69	7,431	2,365	48	2,50	2,00	1,90
V 360/6	F	K3805-F	360,57	6,934	2,207	52	2,50	1,80	1,40
V 361/6	F	K3776-F	360,31	6,929	2,206	52	2,50	2,00	2,00
V 364/7	K	K3282-K	364,46	7,923	2,522	46	2,50	1,40	1,80
V 367/7	FK	K4463-FK	367,12	7,060	2,247	52	2,50	1,40	1,40
V 367/7	F	K3791-F	368,82	7,527	2,396	49	2,50	2,00	1,50
V 368/7	F	K4079-F	368,50	7,370	2,346	50	2,50	1,80	1,50
V 368/7	F	K3591-F	368,82	7,527	2,396	49	2,50	1,60	1,3
V 370/6	F	K3803-F	369,81	6,268	1,995	59	1,60	1,50	1,5
V 375/6	FK	K4746-FK	375,52	6,588	2,097	57	2,20	1,60	1,20
V 381/5	F XL	K6026-F	381,00	5,080	1,617	75	1,35	1,25	0,95
V 381/5	FK	K4773-FK	380,78	5,077	1,616	75	1,80	1,50	1,00
V 385/4	FK	K4759-FK	385,24	4,939	1,572	78	1,80	1,20	1,00
V 386/6	F	K4704-F	386,40	6,662	2,121	58	2,20	1,80	1,40
V 388/7	K	K3035-K	388,85	7,070	2,250	55	2,03	1,40	1,20
V 392/7	F	K3783-F	391,77	7,255	2,309	54	2,50	1,80	1,40
V 395/6	F	K5198-F	395,10	6,585	2,096	60	2,20	1,80	1,20
V 402/7	K	K3541-K	405,13	7,791	2,480	52	2,50	1,40	1,40
V 406/5	F XL	K6064-F	406,40	5,080	1,617	80	1,37	1,27	1,30
V 409/4	FK	K4834-FK	410,00	5,000	1,592	82	1,80	1,20	1,00
V 411/5	F	K3887-F	410,96	5,956	1,896	69	1,80	1,50	1,50
V 419/7	F	K3745-F	418,72	7,346	2,338	57	2,50	2,20	2,00
V 420/6	F	K3802-F	420,09	6,270	1,996	67	1,60	1,50	1,50
V 423/7	F	K3728-F	422,99	7,981	2,540	53	2,50	2,00	2,00
V 431/6	F	K3242-F	430,15	6,145	1,956	70	2,00	1,40	1,50
V 431/6	K	K3242-K	431,06	6,158	1,960	70	2,00	1,40	1,60
V 432/7	F	K3886-F	431,93	7,447	2,370	58	2,50	2,20	2,00
V 432/7	K	K3083-K	432,10	7,450	2,371	58	2,50	1,40	1,40
V 432/7	F	K3083-F	432,10	7,450	2,371	58	2,50	1,40	1,40
V 437/9	FK	K4720-FK	437,80	9,950	3,167	44	3,50	2,50	1,60
V 438/9	F L	K5095-F	438,15	9,525	3,032	46	3,20	1,80	1,20



SYNCHROFLEX® Timing Belt (SFX) V

**Order example**

SYNCHROFLEX® Timing Belt **10 V 100/3 F**

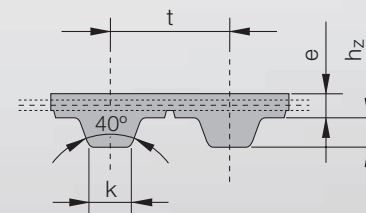
Belt width in mm \_\_\_\_\_  
 Type / Length code \_\_\_\_\_  
 Pitch \_\_\_\_\_

# Timing Belts with special tooth profiles and pitch

## V

Type	Imperial pitch	Mold No.	Length l [mm]	Pitch t [mm]	Module m	Number of teeth z	k [mm]	h <sub>z</sub> [mm]	e [mm]
V 440/5	F	K3998-F	439,82	5,712	1,818	77	1,60	1,50	1,20
V 443/7	K	K3594-K	442,98	7,383	2,350	60	2,50	1,40	1,40
V 444/7	F	K4276-F	444,18	7,403	2,356	60	2,50	1,80	1,40
V 446/7	F	K3743-F	445,80	7,430	2,365	60	2,50	1,80	1,50
V 448/7	F	K3903-F	447,56	7,852	2,499	57	2,50	1,40	1,50
V 449/7	K	K2947-K	449,16	7,880	2,508	57	2,50	1,40	1,80
V 449/9	K	K3509-K	449,18	9,358	2,979	48	3,20	2,20	1,90
V 450/7	F	K3034-F	449,47	7,023	2,235	64	2,50	1,40	1,20
V 457/6	K	K3406-K	457,34	6,352	2,022	72	2,20	1,20	1,60
V 459/9	F	K3690-F	459,10	9,182	2,923	50	3,00	2,50	1,70
V 463/7	F	K3794-F	463,94	7,249	2,307	64	2,50	1,80	1,50
V 468/7	K	K3315-K	468,66	7,559	2,406	62	2,50	1,60	2,00
V 473/7	K	K3086-K	473,46	7,284	2,319	65	2,50	1,40	1,60
V 474/7	F	K3785-F	473,22	7,394	2,354	64	2,50	1,80	1,50
V 480/7	K	K3471-K	480,69	7,753	2,468	62	2,50	1,40	1,60
V 491/7	F	K3666-F	490,73	7,915	2,519	62	2,00	1,40	1,10
V 508/5	F XL	K6011-F	508,00	5,080	1,617	100	1,32	1,22	1,32
V 510/10	F	K6142-F	510,00	10,000	3,183	51	3,50	2,50	1,60
V 511/9	F	K3347-F	511,43	9,471	3,015	54	3,00	2,50	2,00
V 513/8	K	K3223-K	513,88	8,860	2,820	58	2,80	1,60	1,80
V 514/9	K	K3411-K	514,25	9,183	2,923	56	3,20	2,20	2,00
V 515/7	F	K3826-F	515,24	7,577	2,412	68	2,50	1,80	1,60
V 515/9	FK	K4741-FK	515,86	9,553	3,041	54	3,50	2,50	1,40
V 516/7	F	K3680-F	516,56	7,947	2,530	65	2,50	1,40	1,30
V 522/6	F	K4084-F	522,49	6,295	2,004	83	2,50	1,40	1,40
V 532/9	F	K3638-F	532,50	9,509	3,027	56	3,20	2,20	2,00
V 537/7	F	K3088-F	537,88	7,910	2,518	68	2,50	1,40	1,40
V 546/7	F	K3830-F	546,42	7,806	2,485	70	2,50	1,80	1,50
V 548/2	F	K5661-F	548,64	2,540	0,809	216	1,00	0,70	0,60
V 552/6	F	K3703-F	552,46	6,278	1,998	88	2,20	1,20	1,20
V 555/7	FK	K4492-FK	555,43	7,823	2,490	71	2,50	1,80	1,30
V 563/9	F	K3897-F	563,76	9,720	3,094	58	3,20	1,80	2,00
V 567/5	F	K3974-F	567,25	5,971	1,901	95	2,00	1,50	1,50
V 570/9	F	K3840-F	570,71	9,205	2,930	62	3,00	2,50	2,00
V 571/9	F L	K6114-F	571,50	9,525	3,032	60	3,26	1,91	1,69
V 574/7	F	K3890-F	574,64	7,561	2,407	76	2,50	2,20	2,00
V 583/9	F	K3723-F	582,54	9,709	3,090	60	3,00	2,50	2,00
V 592/7	F	K3754-F	592,20	7,896	2,513	75	2,50	2,20	2,00
V 609/5	F XL	K5546-F	609,60	5,080	1,617	120	1,36	1,20	0,70
V 609/4	F	K6037-F	609,55	4,233	1,347	144	1,80	1,20	1,00
V 620/6	FK	K3142-FK	620,24	6,969	2,218	89	2,50	1,40	1,30
V 620/6	F	K3142-F	620,24	6,969	2,218	89	2,50	1,40	1,50
V 623/9	FK	K3206-FK	623,62	9,744	3,102	64	3,20	1,60	1,50
V 626/6	F	K6255-F	626,50	6,265	1,994	100	1,60	1,50	1,50
V 628/6	F	K3782-F	628,30	6,283	2,000	100	2,20	1,80	1,80

Type	Imperial pitch	Mold No.	Length l [mm]	Pitch t [mm]	Module m	Number of teeth z	k [mm]	h <sub>z</sub> [mm]	e [mm]
V 629/9	F	K4593-F	629,50	9,992	3,181	63	3,50	2,50	2,00
V 635/5	F XL	K5394-F	635,00	5,080	1,617	125	1,32	1,20	0,60
V 651/7	F	K3971-F	651,51	7,239	2,304	90	2,50	1,40	1,60
V 685/5	F XL	K5821-F	685,80	5,080	1,617	135	1,36	1,20	0,70
V 686/9	F	K3971-F	686,74	9,538	3,036	72	3,20	1,80	1,50
V 698/9	FK	K4585-FK	699,02	9,986	3,179	70	3,50	2,50	1,60
V 728/15	K	K5667-K	728,50	15,500	4,934	47	4,70	2,30	1,60
V 758/8	FA	K3708-FA	757,21	8,508	2,708	89	3,00	2,50	2,40
V 760/8	F	K5665-F	759,88	8,538	2,718	89	3,00	2,50	1,80
V 779/2	F	K5680-F	779,78	2,540	0,809	307	1,00	0,70	0,60
V 818/6	F	K3853-F	818,33	6,935	2,207	118	2,50	1,80	1,60
V 829/8	F	K3831-F	828,48	8,630	2,747	96	3,00	2,50	2,00
V 850/4	F	K5782-F	850,75	4,032	1,283	211	1,30	1,20	1,90
V 853/5	F	K3770-F	853,14	5,966	1,899	143	1,60	1,50	1,30
V 859/6	F	K5328-F	859,40	6,095	1,940	141	2,44	0,92	0,90
V 862/13	F	K3764-F	861,38	13,252	4,218	65	3,20	2,80	2,50
V 870/9	F	K3867-F	868,95	9,655	3,073	90	3,00	2,50	2,00
V 889/5	F XL	K5601-F	889,00	5,080	1,617	175	1,80	1,20	1,00
V 901/9	F	K3777-F	900,13	9,185	2,924	98	3,00	2,50	2,50
V 910/10	F	K6155-F	910,00	10,000	3,183	91	3,50	2,50	1,60
V 912/7	F	K3661-F	911,71	7,473	2,379	122	2,50	1,60	1,50
V 914/12	F H	K5692-F	914,40	12,700	4,043	72	4,30	2,20	1,85
V 939/9	F	K3878-F	939,13	9,583	3,050	98	3,20	1,80	1,50
V 969/6	F	K5063-F	968,95	6,094	1,940	159	2,44	0,92	0,90
V 971/9	F L	K5354-F	971,55	9,525	3,032	102	3,25	1,90	1,40
V 978/9	F	K5486-F	978,04	9,980	3,177	98	3,50	2,50	2,00
V 990/9	F L	K5185-F	990,60	9,525	3,032	104	3,10	2,20	1,65
V 1000/9	F L	K5202-F	1000,13	9,525	3,032	105	3,10	2,20	1,65
V 1003/2	F	K6219-F	1003,33	2,073	0,660	484	0,60	0,42	0,80
V 1010/10	F	K6156-F	1010,00	10,000	3,183	101	3,50	2,50	1,60
V 1023/9	K	K3399-K	1023,77	9,307	2,963	110	3,20	2,20	2,00
V 1023/9	F	K3765-F	1022,23	9,293	2,958	110	3,00	2,50	2,50
V 1027/9	F	K4259-F	1026,78	9,420	2,998	109	3,00	2,50	2,00
V 1028/9	F L	K5589-F	1028,70	9,525	3,032	108	3,10	1,90	1,65
V 1052/15	F	K6018-F	1052,44	15,708	5,000	67	5,00	1,70	3,00



SYNCHROFLEX® Timing Belt (SFX) V

**Order example**

SYNCHROFLEX® Timing Belt **10 V 100/3 F**

Belt width in mm \_\_\_\_\_

Type / Length code \_\_\_\_\_

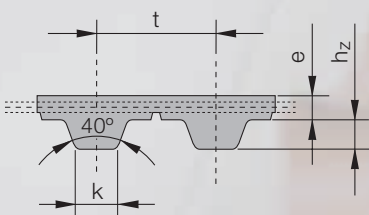
Pitch \_\_\_\_\_



# Timing Belts with special tooth profiles and pitch

## V

Type	Imperial pitch	Mold No.	Length l [mm]	Pitch t [mm]	Module m	Number of teeth z	k [mm]	h <sub>z</sub> [mm]	e [mm]
V 1060/4	F	K6012-F	1059,68	4,975	1,584	213	1,80	1,20	1,00
V 1065/12	FK	K4676-FK	1066,30	12,694	4,041	84	4,00	2,20	1,40
V 1080/4	F	K5746-F	1080,58	4,032	1,283	268	1,32	1,20	0,70
V 1097/5	F XL	K5993-F	1097,28	5,080	1,617	216	1,37	1,27	1,30
V 1102/5	F XL	K5776-F	1102,36	5,080	1,617	217	1,80	1,20	1,00
V 1104/9	F L	K5435-F	1104,90	9,525	3,032	116	3,25	1,90	2,30
V 1106/2	F	K6260-F	1145,42	2,922	0,930	392	0,76	0,51	0,59
V 1110/10	F	K6143-F	1110,00	10,000	3,183	111	3,50	2,50	1,60
V 1140/10	F	K3823-F	1138,28	10,945	3,484	104	3,20	2,80	2,50
V 1149/4	F	K5871-F	1149,12	4,032	1,283	285	1,32	1,20	0,70
V 1152/9	F L	K5493-F	1152,53	9,525	3,032	121	3,10	1,90	1,65
V 1177/4	F	K5814-F	1177,34	4,032	1,283	292	1,30	1,20	0,90
V 1178/5	F XL	K5876-F	1178,56	5,080	1,617	232	1,80	1,20	1,00
V 1215/9	FA	K3316-FA	1213,42	9,334	2,971	130	3,00	2,50	2,00
V 1215/9	F	K5203-F	1213,42	9,334	2,971	130	3,20	1,80	2,00
V 1257/9	F L	K5310-F	1257,30	9,525	3,032	132	3,20	1,90	1,65
V 1270/12	F H	K5258-F	1270,00	12,700	4,043	100	4,45	2,18	2,01
V 1300/9	F	K5335-F	1300,65	9,425	3,000	138	3,00	2,50	2,00
V 1332/6	F	K3781-F	1331,15	6,279	1,999	212	2,20	1,80	1,80
V 1390/9	F L	K5449-F	1390,65	9,525	3,032	146	3,20	1,90	1,30
V 1423/9	F	K5495-F	1423,40	9,553	3,041	149	3,50	1,90	1,30
V 1529/6	F	K4866-F	1528,71	6,291	2,002	243	2,20	1,80	1,30
V 1563/9	F	K4035-F	1561,56	9,407	2,994	166	3,00	2,50	2,00
V 1584/5	F XL	K5600-F	1584,96	5,080	1,617	312	1,80	1,20	1,00
V 1635/9	F	K3340-F	1632,47	9,382	2,986	174	3,00	2,50	2,50
V 1637/9	F	K4582-F	1633,86	9,390	2,989	174	3,00	2,50	2,50
V 1676/12	F	K5262-F	1672,97	12,674	4,034	132	4,40	2,30	1,95
V 1778/12	F H	K5260-F	1778,00	12,700	4,043	140	4,40	2,30	1,40
V 1997/18	F	K5331-F	1997,04	18,840	5,997	106	6,50	4,00	3,00



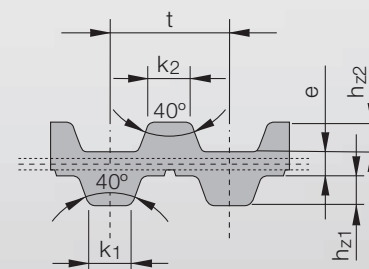
SYNCHROFLEX® Timing Belt (SFX) V

**Order example**

SYNCHROFLEX® Timing Belt 10 V 100/3F  
 Belt width in mm \_\_\_\_\_  
 Type / Length code \_\_\_\_\_  
 Pitch \_\_\_\_\_

## V-DL

Type	Imperial pitch	Mold No.	Length l [mm]	Pitch t [mm]	Module m	Number of teeth z	k <sub>1</sub> [mm]	k <sub>2</sub> [mm]	h <sub>z1</sub> [mm]	h <sub>z2</sub> [mm]	e [mm]
V 409/4	DL	K4834-DL	409,10	4,989	1,588	82	1,80	1,80	1,20	1,20	1,00
V 431/5	DL XL	K6038-DL	431,80	5,080	1,617	85	1,37	1,37	1,27	1,27	0,81
V 454/7	DL	K3460-DL	453,44	7,818	2,489	58	2,20	2,50	1,00	1,40	1,20
V 461/5	DL	K3760-DL	460,82	5,486	1,746	84	1,60	1,60	1,50	1,50	1,10
V 551/7	DL	K3304-DL	550,13	7,536	2,399	73	2,80	2,50	1,60	1,60	1,50
V 758/8	DLII	K3708-DLII	757,48	8,511	2,709	89	3,00	5,50	2,50	2,00	2,70
V 785/6	DL	K4592-DL	785,25	6,282	2,000	125	2,20	2,20	1,50	1,50	0,90
V 1215/9	DL	K3316-DL	1212,51	9,327	2,969	130	3,20	3,20	1,80	1,80	1,70
V 1357/6	DL	K3579-DL	1356,12	6,919	2,202	196	2,20	2,20	1,80	1,80	1,30
V 1635/9	DL	K3340-DL	1633,86	9,390	2,989	174	3,00	3,00	2,50	2,50	2,30
V 1635/9	DLII	K3340-DLII	1633,86	9,390	2,989	174	3,00	3,20	2,50	1,80	2,30



SYNCHROFLEX® Timing Belt (SFX) V-DL

**Order example**

SYNCHROFLEX® Timing Belt 10 V 409/4DL  
 Belt width in mm \_\_\_\_\_  
 Type / Length code \_\_\_\_\_  
 Pitch \_\_\_\_\_

# SYNCHROFLEX® Timing Belts

## Tolerances

### Length tolerances for standard SYNCHROFLEX® Timing Belts

The belt measuring is performed according to DIN 7721, referred to the centre distance.

Belt length	Length tolerance in relation to centre distance
up to 320 mm	±0,15 mm
320 – 630 mm	±0,18 mm
630 – 1000 mm	±0,25 mm
1000 – 1960 mm	±0,40 mm
1960 – 3500 mm	±0,50 mm
3500 – 4500 mm	±0,80 mm
4500 – 6000 mm	±1,20 mm

### Width tolerances for standard SYNCHROFLEX® Timing Belts

Type group	up to 50 mm	50 – 100 mm	over 100 mm
K 1	±0,3 mm	±0,5 mm	±0,5 %
K 1,5	±0,3 mm	±0,5 mm	±0,5 %
T 2	±0,3 mm	±0,5 mm	±0,5 %
M	±0,3 mm	±0,5 mm	±0,5 %
T 2,5	±0,3 mm	±0,5 mm	±0,5 %
T 5	±0,3 mm	±0,5 mm	±0,5 %
T 5-DL	±0,3 mm	±0,5 mm	±0,5 %
T 10	±0,5 mm	±0,5 mm	±0,5 %
T 10-DL	±0,5 mm	±0,5 mm	±0,5 %
T 20	±1,0 mm	±1,0 mm	±1,0 %
T 20-DL	±1,0 mm	±1,0 mm	±1,0 %
AT 3	±0,3 mm	±0,5 mm	±0,5 %
AT 5	±0,5 mm	±0,5 mm	±0,5 %
AT 10	±1,0 mm	±1,0 mm	±1,0 %
ATP 10 / ATP 15	±1,0 mm	±1,0 mm	±1,0 %
ATP 20	±1,0 mm	±1,0 mm	±1,0 %

Width tolerance for belt width in relation to standard cord arrangement

### Warranty

All Information has been thoroughly compiled on the basis of today's knowledge. We wish to particularly point out that the technical data is subject to tolerances and must not be deemed as a delivery specification. Furthermore, we wish to underline that the calculation-section and its practical application implies development risks. No claims can be implied from any mistakes or possible misinterpretations during practical application.

### Remark:

Upon special statements smaller tolerances are possible.

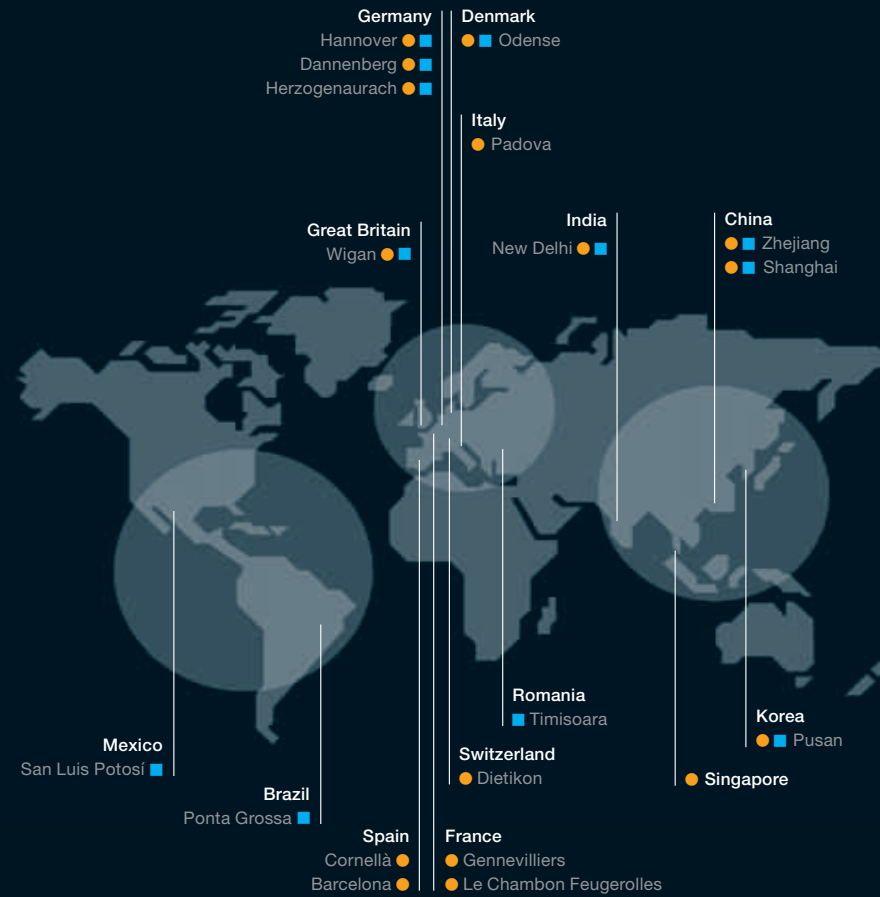
Please ask for tolerances for special cord arrangement.

ContiTech  
Specialist in rubber and plastics technology

[www.contitech.de](http://www.contitech.de)

Power transmission technology worldwide

● Sales offices  
■ Production sites



WT 6220 E 09.06 (BL) Printed with CONTI/AIR® offset printing blankets on leached paper free of chlorine

ContiTech Antriebssysteme GmbH  
Postfach 445  
D-30004 Hannover  
Philipsbornstraße 1  
D-30165 Hannover  
Phone +49 511 938-71  
Fax +49 511 938-5128

ContiTech Antriebssysteme GmbH  
D-29451 Dannenberg  
Phone +49 5861 806-0  
Fax +49 5861 806-302

The content of this publication is provided for information only and without responsibility. ContiTech AG's obligations and responsibilities regarding its products are governed solely by the agreements under which the products are sold. Unless otherwise agreed in writing, the information contained herein does not become part of these agreements. This publication does not contain any guarantee or agreed quality of ContiTech AG's products or any warranty of merchantability, fitness for a particular purpose and non-infringement. ContiTech AG may make changes in the products or services described at any time without notice. This publication is provided on an "as is" basis. To the extent permitted by law, ContiTech AG makes no warranty, express or implied, and assumes no liability in connection with the use of the information contained in this publication. ContiTech AG is not liable for any direct, indirect, incidental, consequential or punitive damages arising out of the use of this publication. Information contained herein is not intended to announce product availability anywhere in the world. © 2006 ContiTech AG. All rights reserved.